

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

Claims

We claim:

1. A method for determining if a gesture has been received from a user viewing a page comprising the steps of:
 - receiving a stroke placed on said page;
 - determining whether the stroke includes a gesture; and
 - alerting a system or application that said gesture has been received.
2. The method according to claim 1, further comprising:
 - erasing the stroke that formed the gesture.
3. The method according to claim 1, further comprising:
 - determining an object associated with said gesture; and
 - passing said object to said system or said application along with said gesture.
4. The method according to claim 1, further comprising the step of:
 - rendering the received stroke.
5. The method according to claim 1, wherein said stroke is placed anywhere on said page.
6. A method for determining if a gesture has been received from a user viewing a page comprising the steps of:
 - receiving a stroke placed on said page;
 - rendering said stroke on said page;
 - sending said stroke to an application;
 - determining in said application if said stroke includes a gesture; and,

processing said gesture.

7. A data structure for storing a gesture comprising:

a first portion associated with an identity of said gesture;

a second portion describing a normalized shape of said gesture;

a third portion describing an action area of said gesture; and,

a fourth portion describing a default action or control method or property.

8. A method for determining if received strokes are gestures comprising:

normalizing at least one stroke to create a normalized at least one stroke;

computing Chebychev polynomials for the coordinates of the at least one stroke;

combining the normalized at least one stroke with the Chebychev polynomials to create a

Bayes net;

comparing said Bayes net to previously computed Bayes nets for known gestures;

determining whether said Bayes net correlates with one of said computed Bayes nets; and

if said Bayes net correlates with one of said computed Bayes nets, then processing said at

least one stroke as a gesture corresponding to said one of said computed Bayes nets.

9. The method according to claim 8, further comprising:

compressing said at least one stroke into a single point stream; and

using said single point stream to create said Bayes net.

10. The method according to claim 8, further comprising:

scaling the time entry of the points of said at least one stroke to create a scaled time; and

using said scaled time to create said Bayes net.

11. The method according to claim 10, further comprising:

computing stroke windings and duration of the at least one stroke; and,

using said scaled time in said Bayes net.

12. A computer readable medium including a program for determining whether a gesture has been received from a user viewing a page, the program comprising instructions for performing the steps of:

receiving a stroke placed on said page;
determining whether the stroke includes a gesture; and
alerting a system or application that said gesture has been received.

13. The computer readable medium according to claim 12, said program further comprising instructions for performing the steps of:

erasing the stroke that formed the gesture.

14. The computer readable medium according to claim 12, said program further comprising instructions for performing the steps of:

determining an object associated with said gesture; and
passing said object to said system or said application along with said gesture.

15. The computer readable medium according to claim 12, said program further comprising instructions for performing the step of rendering the received stroke.

16. The computer readable medium according to claim 12, wherein said stroke is placed anywhere on said page.

17. A system for implementing gestures comprising:
a digitizer associated with a display for displaying a page;
a stylus; and
a processor,

69 wherein, in response to a stroke received anywhere on said page, by interaction between
70 said stylus and said digitizer, said processor determines whether said stroke includes a gesture
71 and processes said gesture using the action area of said gesture and a method or property of said
72 gesture.

73